

AI 100

11.6"

Work Order ID 92691

92691

Page 1

November-07-12 2:34:17 PM

Item ID: D2055

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS2

Item Name: Clamp

Start Date: 11/06/12 Start Qty: 10.00 *10*

Cust Item ID:

Required Date: 11/16/12 Req'd Qty: 10.00 *10*

Customer:

Reference:

Approvals:	Process Plan: <u>MLJ</u>	Date: <u>12-11-08</u>	Tooling:	Date:	Run	Start	*NR1*
QC:		Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100 *100* Doosan	Hardinge CNC LATHE SMALL Machine as per Folio FA203 Deburr all sharp edges as per dwg	0.00 0.00							DAS 04 9-83
110 *110* QC	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00							DAS 04 9-83
120 *120* QC	QC8- Inspect parts - second check Memo	0.00 0.00							

12-12-15 10 0

12-12-15 10 0

12-12-15 10 0

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear	General									
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>					
	Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>					
	Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>					
	Crushed/Crimped. <input type="checkbox"/>	Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>					
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>						
	Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>						
	Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>					
	Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>							
	Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>							
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>							
	Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>							

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November-07-12 2:34:17 PM

92691

Page 2

Item ID: D2055

Accept

N900040100

Setup

Start

NS1

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NS2

Item Name: Clamp

Start Date: 11/06/12 Start Qty: 10.00 *10*

Required Date: 11/16/12 Req'd Qty: 10.00 *10*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* HandFinish	Chemical Conversion Coat per QSI005 4.1	0.00							10 12/12/18
	Memo	0.00							
Hand Finishing									
160 *160* Powdercoat	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3	0.00							ML 12/12/18
Powder Coating	Memo	0.00							
	START TIME: OVEN TEMPERATURE: FINISH TIME:	2-10 320° F 2-40							
170 *170* QC	QC3- Inspect Part Finish	0.00							10 12/12/18
Quality Control	Memo	0.00							

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS						
			Rework Scrap Use-as-is Work Order Update	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Skid-tube Machining Thermoforming Large Fab	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Crosstube Small Fab Finishing Composite	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Engineering Quality Other
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear					General						
					Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence Wave/Twist in Tube	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish Folio	Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread Offset Out of Calibration Out of Sequence Outside Dimensions	Ovalized Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled	Other	

Work Order ID 92691

November-07-12 2:34:17 PM

92691

Page 3

Item ID: D2055

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Clamp

Start Date: 11/06/12 **Start Qty:** 10.00

10

Cust Item ID:

Required Date: 11/16/12 **Req'd Qty:** 10.00

10

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

180

Identify as per dwg & Stock Location SA

0.00

101

SP

180

Packaging

Packaging

Memo

0.00

190

QC21- Final Inspection - Work Order Release

0.00

13/11/10 MF

190

QC

Quality Control

Memo

0.00

12-12-27

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/>										
FAULT CATEGORY										
Landing Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence Wave/Twist in Tube	General									
	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced						
	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure						
	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld						
	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled						
	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved							
	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other						
	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge							
	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset								
	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration								
	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence								
	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions								

Picklist Print

November-07-12 2:34:17 PM

Page 1

Work Order ID: 92691

Parent Item: D2055

Parent Item Name: Clamp

Start Date: 11/06/12

Required Date: 11/16/12

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP C02.03.07Now turned in houseNG
JLM VERIFIED BY:EC

IPP REV:D NOW ON DOOSAN 10-02-01

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R1.000 ROUND BAR 1.00"		Purchased	No			120	f	67.5560	0.1042	1.096842			

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
013	4.82	
121192	4.82	
MAT008	24	
121070	24	
MAT013	38.736	
116406	12.103	
118271	5.7	
[22521]	8.933	
[23483]	12	

12-12-12
(DAS
04
8-09)

. 583
. 729

1. 312

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: _____ Date: _____

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear	General										
	Bending	Bend	Grain	Ovalized	Pressure/Forced						
	Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure						
	Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld						
	Crushed/Crimped.	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled						
	Cuffs	Contamination	Maintenance	Part Moved							
	Heat Treat	Countersink	Mislabeled	Positioned Wrong							
	Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge							
	Ripples in Bend	Drill Holes	Offset								
	Torque Waves in Extrusion	Drawing	Out of Calibration								
	Turning Sequence	Finish	Out of Sequence								
	Wave/Twist in Tube	Folio	Outside Dimensions								

DART AEROSPACE LTD	Work Order:	92691
Description: Clamp	Part Number:	D2055
Inspection Dwg: D2055	Rev: C1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

SAS

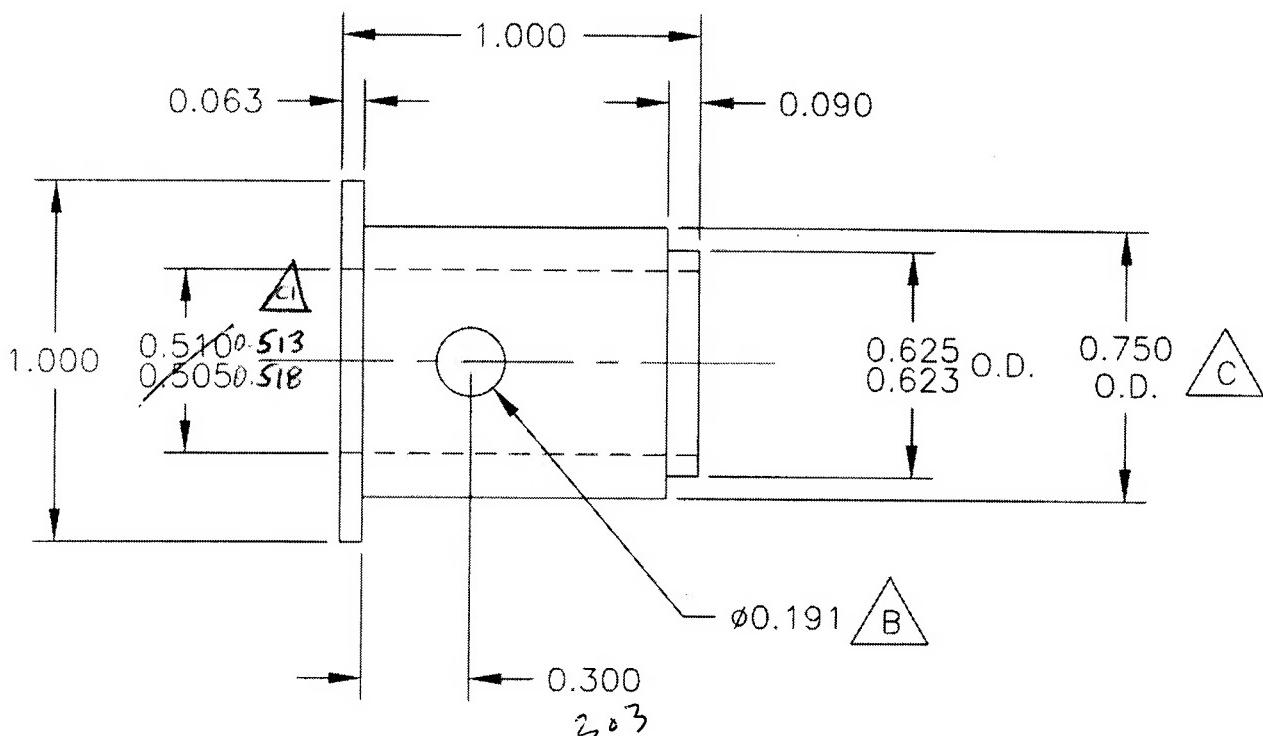
Measured by:	RCP	04 9-15	Audited by:	SS	Prototype Approval:	N/A
Date:	12.12.15		Date:	12.12.15	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	10.02.02	New Issue	KJ	 

DART

0400
1992

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. C
KE	SP	D2055	SHEET 1 OF 1
DATE		TITLE	SCALE
98.12.10		CLAMP	2:1
A	92.03.13	NEW ISSUE	
B	98.10.15	0.191 DIA WAS 0.187 DIA (TSR A1100) REDRAWN, ADD FINISH	
C	98.12.10	ADDED 0.750 O.D. DIMENSION	
C1	CP # 01-06-05	MODIFY HOLE SIZE, ADD P/L OPTION	



UNCONTROLLED COPY
NOT DRAWN TO
SPECIFICATION
WHICH IS THE
WORKING DRAWING
12-11-08
MUL

ACID ETCH & ALUDINE PER
DART QSI D05 4.1
POWDER COAT BLACK SAMITEK (4.3 S.7)
PER DART QSI D05 4.3

MATERIAL: 6061-T6 ROD (QQ-A-225/8)
FINISH: BLACK ANODIZE OR
BREAK ALL SHARP EDGES 0.015 MAX
TOLERANCES PER DART QSI 018 UNLESS OTHERWISE NOTED